

## Claims

1. A device for heat exchange between flowable media, at least one of which is in the fluid state, having a heat exchanger block, which is bounded on one side by an inlet chamber (1) and on the opposite side by a outlet chamber (3) for intake and discharge of the fluid medium, having fluid paths (7) for the fluid medium which extend through the block from the inlet chamber (1) to the outlet chamber (3) and which are separated from each other by flow paths positioned between them for conveyance of the other medium capable of flow, and having a cover plate (9), which, covering the fluid paths (7) and flow paths (8), extend from the inlet chamber (1) to the outlet chamber (3), characterized in that the cover plate (9) has at least one interior passage (13) which, bypassing the fluid paths (7), extends as bypass channel from the inlet chamber (1) to the outlet chamber (3), may be blocked by at least one pressure control mechanism (11), and may be unblocked by opening of the mechanism (11) on the basis of a differential pressure exceeding a predetermined threshold value and prevailing between inlet chamber (1) and outlet chamber (3).
2. The device as claimed in claim 1, wherein a section of a hollow cast element in the form of a flat tube (9) formed by extrusion is provided, which is closed at both ends by a sealing plate (15).
3. The device as claimed in claim 2, wherein through bores (17, 19) are formed in the wall of the flat tube (9) in the end areas adjoining the inlet chamber (1) and outlet chamber (3), which through bores (17, 19) form a fluid connection between at least one passage (13) of the flat tube (9) and the inlet chamber (1) and the outlet chamber (3).

4. The device as claimed in claim 3, wherein the flat tube (9) has two interior passages (13) each of which is connected by way of through bores (17, 19) to the inlet chamber (1) and/or the outlet chamber (3).
5. The device as claimed in claim 4, wherein at least one pressure control mechanism (11) is provided for each passage (13) of the flat tube (9).
6. The device as claimed in one of claims 3 to 5, wherein the pressure control mechanism (11) is mounted for each passage (13) in a through bore (17, 19) extending through the wall of the flat tube (9).
7. The device as claimed in claim 6, wherein pressure control mechanisms (11) are provided in the through bore (19) connecting the passage (13) to the outlet chamber (3).
8. The device as claimed in one of claims 1 to 7, wherein a return valve (11) in the form of a spring-loaded seat valve is provided as pressure control mechanism.
9. The device as claimed in claim 8, wherein there is configured in the wall of each passage (13), in the area opposite the return valve (11), an access bore (23) which may be closed off by a sealing component (23) and which permits access to the valve (11).
10. The device as claimed in one of claims 2 to 9, wherein a passageway (21) forming a fluid connection between the passages (13) is formed in the sealing plates (15) closing off the ends of the flat tube (9).
11. The device as claimed in claim 10, wherein the passageway of the sealing plates (15) is in the form of an elongated groove (21) made in such sealing plates (15) which extends over the ends of the passages (13) present in the flat tube (9).

12. The device as claimed in one of claims 1 to 11, wherein the respective pressure control mechanism (11) consists of a sealing component actuated by means of pressure and/or temperature.